

INITIAL ATTACK SIZE UP

ONFIRMED LEGAL: _____ ¼ _____ ¼ SEC(S): _____ TWN: _____ RNG: _____

LATITUDE: _____ LONGITUDE: _____

(degrees decimal minutes)

OWNERSHIP: _____ PROTECTION: _____ ACRES: _____

Control Problems ? No Yes (specify _____)

Additional Resources Needed? No Yes (specify _____)

Are you within your comfort level? Yes No Actions: Proceed Change Tactics
Hold Re-evaluate/Disengage Request more Experienced IC

Values at Risk:

Human Life: 1) Entrapment Situation 2) Reinforce Safety Zones/Escape Routes
3) Other: (Explain _____)

Property: 1) Primary Residences 2) Seasonal Residences 3) Commercial
4) Outbuildings 5) Other

Natural Resources: (Explain _____)

Spread Potential: 1) Low 2) Moderate 3) High 4) Extreme

Character of Fire:

- 1) Smoldering 3) Running 5) Torching 7) Crown/Spotting
- 2) Creeping 4) Spotting 6) Crowning 8) Erratic

Fire Intensity Level: (In feet) _____ (Average flame length at head of fire)

Slope at Head of Fire: _____ (Actual percent %)

Position on Slope:

- 1) Ridgetop 3) Upper 1/3 5) Lower 1/3 7) Valley Bottom 9) Flat/Rolling
- 2) Saddle 4) Middle 1/3 6) Canyon Bottom 8) Mesa/Plateau

Aspect:

- 0) Flat 1) North 2) NE 3) East 4) SE 5) South 6) SW 7) West 8) NW 9) Ridgetop

Fuel Type:

- 1) Grass 3) Intermountain Brush 5) Ponderosa/Conifer 7) Aspen 9) Other
- 2) Grass/Brush 4) Open Pine w/Grass 6) Spruce/Fir 8) Slash

Weather Conditions:

- 1) Clear 3) Building Cumulus 5) Lightning 7) Intermittent Showers
- 2) Scattered Clouds 4) T-Storms in area 6) Overcast 8) Heavy Showers

Wind Direction: _____ Speed: _____ MPH Gusts: _____

Resources Ordered	Resource ID	Date ETA	At scene Time	No. of People	Location	Released Time

BEAVERHEAD-DEERLODGE NATIONAL FOREST AVIATION IN BRIEFING BOOKLET



2015

The information listed is a **Mandatory** briefing to perform air operations on the Beaverhead-Deerlodge National Forest and will be given to all new aircrews, AOBD's and ASGS's attached to incident management teams for operations on the Forest. This information will be verbally transferred to ensure safety and compliance as it covers the following items:

- CWN Marry-up and Crew Rotation Procedures
- B-D National Forest Flight Following Protocols
- Flight Hazard Map
- Risk Management
- Local Area Information/Fuel
- EMS/Medical Facility Lat and Long Coordinates
- B-D Aquatic Nuisance Species (ANS) Plan
- Incident within an Incident Protocol
- B-D National Forest Phone List
- R-1 Regional Phone List
- Fire Traffic Area
- GPS Format "WGS 84" hddd°mm.mmm
- Forest Communications Frequencies
- Aviation Transfer of Risk
- Retardant Mishaps and reporting

In Addition, if needed, the following will also be addressed:

- The Regional Aviation Plan
- The Forest Aviation Plan
- IHOG Procedures and Applicable Guidelines
- Known Aviation Activities on Forest
- Environmental Management Systems (WEEDS)

Fahrenheit to Celsius: $(^{\circ}\text{F} - 32) / 9 \times 5$

Celsius to Fahrenheit: $(^{\circ}\text{C} \times 9) / 5 + 32$

$^{\circ}\text{F}$	$^{\circ}\text{C}$										
1	-17	39	3.9	53	11.7	79	26.1	105	40.6	131	55
2	-17	40	4.4	54	12.2	80	26.7	106	41.1	132	56
3	-16	41	5	55	12.8	81	27.2	107	41.7	133	56
4	-16	42	5.6	56	13.3	82	27.8	108	42.2	134	57
5	-15	43	6.1	57	13.9	83	28.3	109	42.8	135	57
6	-14	44	6.7	58	14.4	84	28.9	110	43.3	136	58
7	-14	45	7.2	59	15	85	29.4	111	43.9	137	58
8	-13	46	7.8	60	15.6	86	30	112	44.4	138	59
9	-13	47	8.3	61	16.1	87	30.6	113	45	139	59
10	-12	48	8.9	62	16.7	88	31.1	114	45.6	140	60.0
11	-12	49	9.4	63	17.2	89	31.7	115	46.1	141	60.6
12	-11	50	10	64	17.8	90	32.2	116	46.7	142	61.1
13	-11	51	10.6	65	18.3	91	32.8	117	47.2	143	61.7
14	-10	52	11.1	66	18.9	92	33.3	118	47.8	144	62.2
15	-9.4	53	11.7	67	19.4	93	33.9	119	48.3	145	62.8
16	-8.9	54	12.2	68	20	94	34.4	120	48.9	146	63.3
17	-8.3	55	12.8	69	20.6	95	35	121	49.4	147	63.9
18	-7.8	56	13.3	70	21.1	96	35.6	122	50	148	64.4
19	-7.2	57	13.9	71	21.7	97	36.1	123	50.6	149	65.0
20	-6.7	58	14.4	72	22.2	98	36.7	124	51.1	150	65.6
21	-6.1	59	15	73	22.8	99	37.2	125	51.7	151	66.1
22	-5.6	60	15.6	74	23.3	100	37.8	126	52.2	152	66.7
23	-5	61	16.1	75	23.9	101	38.3	127	52.8	153	67.2
24	-4.4	62	16.7	76	24.4	102	38.9	128	53.3	154	67.8
25	-3.9	63	17.2	77	25	103	39.4	129	53.9	155	68.3
26	-3.3	64	17.8	78	25.6	104	40	130	54.4	156	68.9

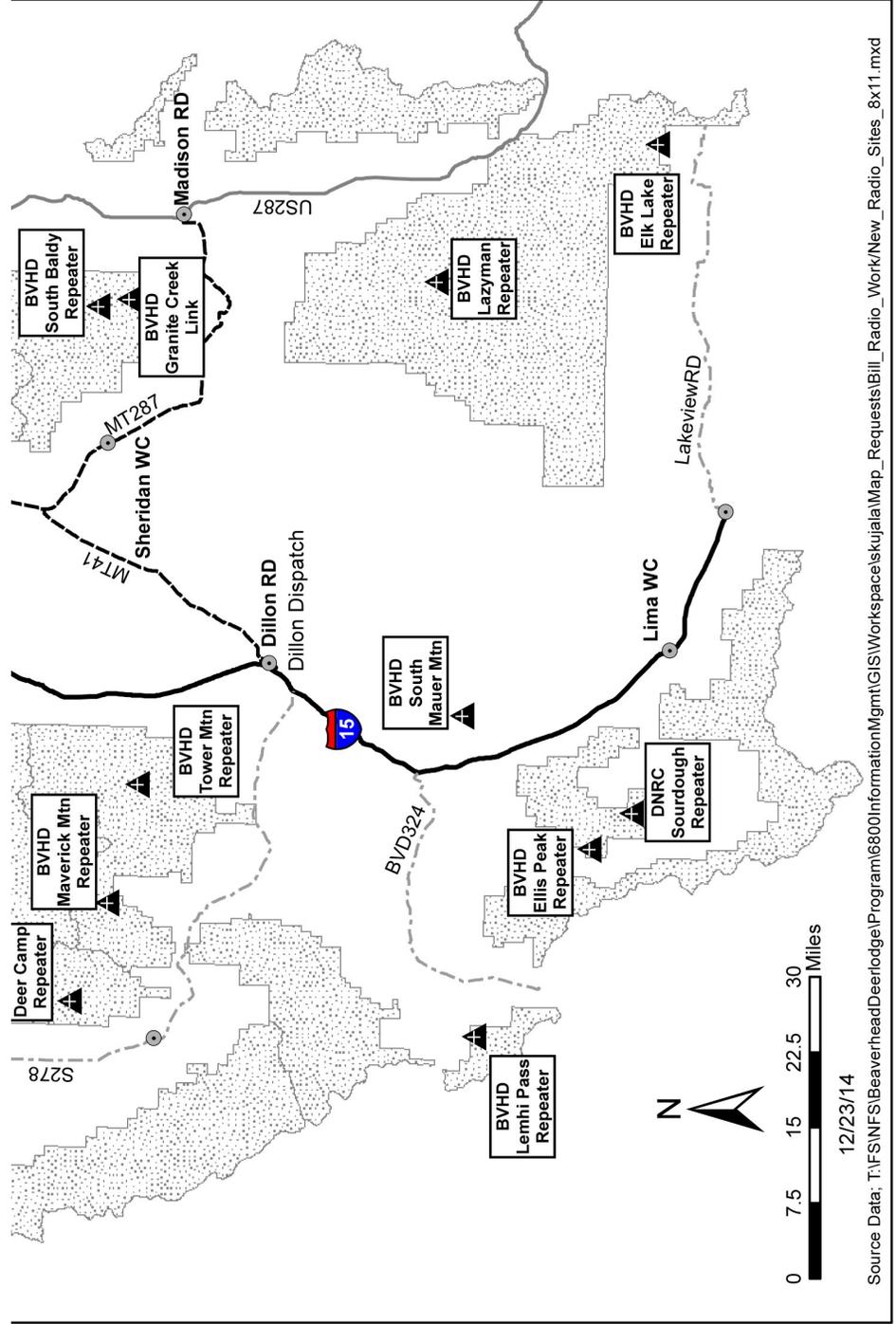
FREQUENCY LIST

IDENTIFIER	RX	TX	Tone	NOTES
BEAVERHEAD DIRECT	171.425 N	171.425 N	131.8	SOUTH B-D
B-D VIPOND PARK	171.425 N	172.325 N	103.5	Wise River
B-D DEER CAMP	171.425 N	172.325 N	167.9	Jackson
B-D LAZYMEN	171.425 N	172.325 N	123.0	Gravellys
B-D LEMHI PASS	171.425 N	172.325 N	110.9	Lemhi Pass
B-D MAVERICK	171.425 N	172.325 N	100.0	Polaris
B-D SOUTH BALDY	171.425 N	172.325 N	146.2	Virginia City
B-D TIE CREEK	171.425 N	172.325 N	136.5	Wisdom
B-D ELK LAKE	171.425 N	172.325 N	156.7	Centennial
B-D TOWER MTN	171.425 N	172.325 N	162.2	Dillon
B-D DICKIE PEAK	171.425 N	172.325 N	151.4	Wise River
B-D ELLIS PEAK	171.425 N	172.325 N	127.3	Big Sheep
B-D PORTABLE	171.425 N 171.000 N	172.325 N 170.325 N	192.8 192.8	Beaverhead Deerlodge
DEERLODGE DIRECT	171.000 N	171.000 N	141.3	NORTH B-D
B-D RED MTN	171.000 N	170.350 N	103.5	Butte
B-D JACK MTN	171.000 N	170.350 N	167.9	Boulder
B-D LUKE MTN	171.000 N	170.350 N	123.0	Drummond
B-D EMERINE	171.000 N	170.350 N	146.2	Philipsburg
B-D BULL MTN	171.000 N	170.350 N	100.0	Elkhorn City
B-D BLIZZARD HILL	171.000 N	170.350 N	156.7	Deer Lodge
B-D HENDERSON	171.000 N	170.350 N	136.5	Maxville
B-D QUEENS HILL	171.000 N	170.350 N	151.4	Pony
B-D DISCOVERY BASIN	171.000 N	170.350 N	162.2	Georgetown
INITIAL ATTACK A/A	132.700	132.700	N/A	Forest wide
INITIAL ATTACK A/G #10	166.9375 N	166.9375 N	TT 110.9	SIMPLEX
INITIAL ATTACK A/G #52	168.3875 N	168.3875 N	TT 110.9	SIMPLEX
INITIAL ATTACK A/G #53	168.4875N	168.4875N	TT 110.9	SIMPLEX
Dillon DNRC SOUDOUGH	151.175 N	151.475 N	114.8	Medicine Lodge
Anaconda DNRC RUMSEY	151.190 N	159.360 N	141.3	Anaconda
BLM DIRECT	169.6750 N	169.6750 N		West, MT
BLM SOA 1	168.225 N	168.225 N		Scene of Action 1
BLM SOA 2	167.175 N	167.175 N		Scene of Action 2
FIRE RED	154.070 N	154.070 N		Fire Co-op
GOLD	153.905 N	153.905 N		Mutual Aid
YELLOW	151.220 N	151.220 N		Fire Tac
ORANGE	151.400 N	151.400 N		State A/G
LIFE FLIGHT (TAN)	155.340 N	155.340 N		EMS A/G
AIR GUARD	168.625 N	168.625 N	110.9	
DILLON WEATHER(NOAA)	162.425 W			

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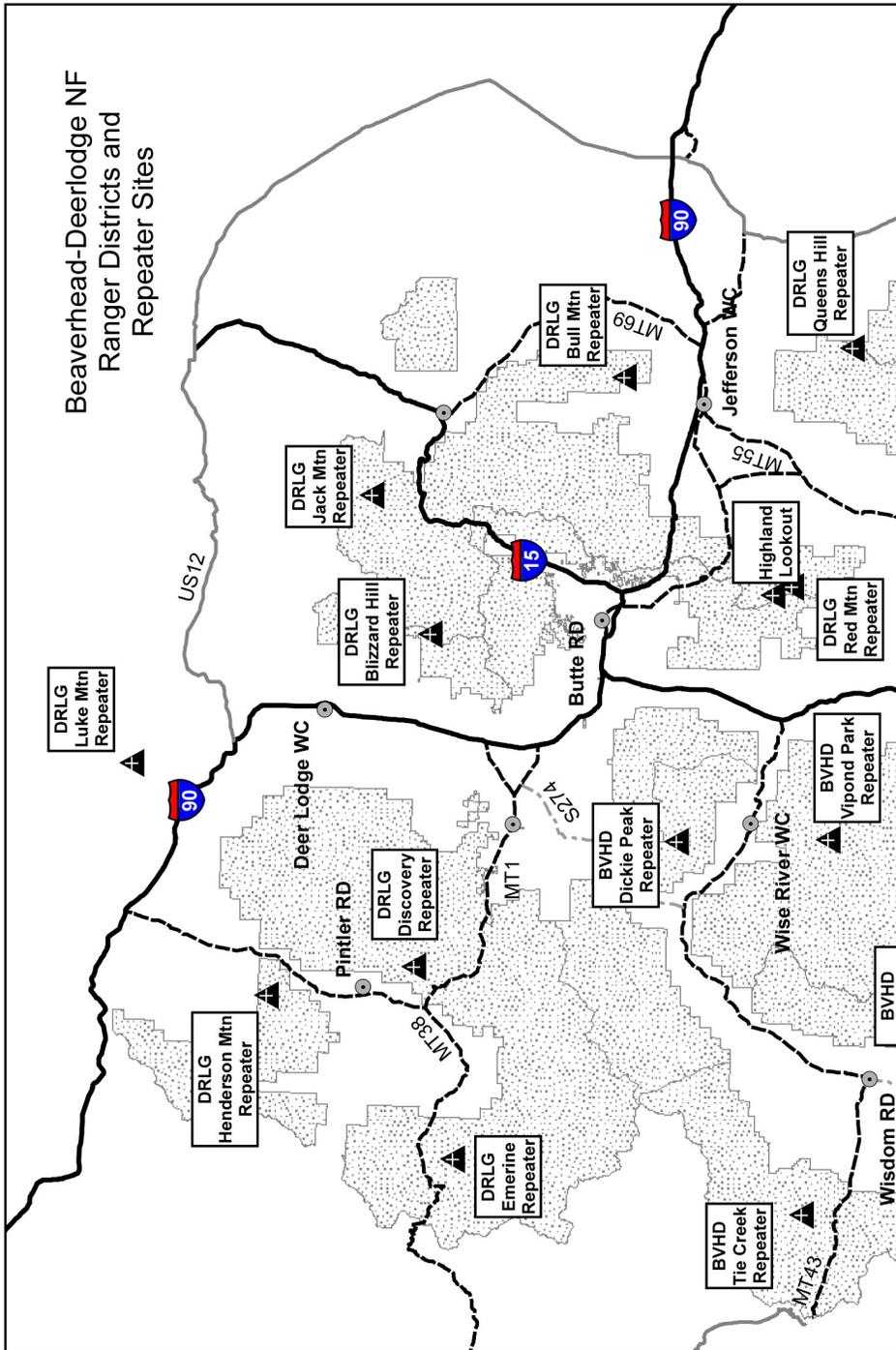


Call-When-Needed Marry-Up Procedures for the Beaverhead-Deerlodge National Forest

When Call When Needed (CWN) Aircraft are utilized for fire and project work the helicopter manager and helicopter contractor will “marry-up” at a site that will be predetermined by either the Forest Aviation Officer or the Air Operations Branch Director of an incident management team that is operating on the forest. Commonly, this location will be at the airport closest to the incident or project. The reasoning behind this procedure is to give the manager a chance to meet the pilot and get the initial required inspections done before the aircraft is ordered for a flight on the incident or project. In the past, helicopters have arrived on incidents without a manager present and been given missions to fly. This is a major safety/policy violation. Having the manager and aircraft meet at a predetermined location, the proper process is established for management of these resources.

When helicopter managers are rotating through days off and a hand off of paper work and procedures is necessary, this can be done on site at the designated helibase. Since pre-use inspections and carding verification has already been completed and the pilot will be familiar with the area, a good hand-off of information from one manager/module to another will be sufficient to ensure safety and contract compliance.

The Forest requires all helicopter buckets, snorkels, and any other device that may contact water to be washed before the aircraft becomes available to support fire operations. The protocol for this operation is spelled out in the Aquatic Invasive Species Mitigation Plan which is included on pages 16-17 of this In-briefing booklet.



Additional Information and Policy

Security of Aircraft

In general, the security threat assessment for aircraft operations on the Beaverhead-Deerlodge Nat'l Forest is Low. Specific conditions can be evaluated on a case-by-case basis to determine if additional security precautions are required. Incident Management Team air bases on the forest are required to have dedicated night security. The Forest Aircraft Security Plan and briefing are available from the FAO or their designee.

Sterile Cockpit

Sterile cockpit procedures will be maintained within a 5 mile radius of an airport and when taking off or landing. No radio or cockpit communications will be performed during this period that is not directly related to the safe flight of the aircraft.

Transponders

All aircraft working fire incidents on the Beaverhead-Deerlodge Nat'l Forest shall operate with their transponder on and tuned to 1255 "Squawk 1255".

Aviation Mishaps

When an aviation mishap occurs on the Beaverhead-Deerlodge NF the Dillon Dispatch Center will follow the Interagency Aviation Mishap Response Guide and Checklist. The goal is to provide the quickest response possible to locate the missing aircraft and begin the process of rescuing any survivors. The appropriate Sheriff's Office will be notified immediately to begin search and rescue operations. All USFS search and rescue efforts will be coordinated closely with the Sheriff's office. Available exclusive use aircraft located on forest may be mobilized to begin searching for the aircraft if communication is lost. If exclusive use aircraft are not available, Call-When-Needed Aircraft can fill the same role if available.

SAR Operations

Dispatch will provide the following information to the Search and Rescue resources about the lost aircraft:

- Time and Location last contact was made; Lat/Long preferable
- Bearing aircraft was traveling
- Destination/Mission aircraft was performing
- N number/Tail number of lost aircraft
- Type of aircraft
- Color of aircraft
- Number of people on board and names of people
- Last frequency A/C was contacted on.

ENNIS, MONTANA
Rise and Set for the Sun for 2015
Mountain Standard Time

Astronomical Applications Dept.
U. S. Naval Observatory
Washington, DC 20392-5420

Day	Jan.		Feb.		Mar.		Apr.		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set														
01	0806	1655	0748	1734	0705	1814	0608	1855	0516	1933	0442	2008	0443	2019	0511	1955	0548	1905	0625	1808	0706	1715	0746	1646
02	0806	1656	0747	1735	0704	1815	0606	1856	0514	1934	0442	2008	0443	2018	0512	1953	0550	1903	0626	1806	0707	1713	0747	1645
03	0806	1657	0745	1737	0702	1817	0604	1857	0513	1936	0441	2009	0444	2018	0513	1952	0551	1901	0627	1804	0709	1712	0748	1645
04	0806	1658	0744	1738	0700	1818	0602	1859	0511	1937	0441	2010	0445	2018	0515	1951	0552	1859	0629	1802	0710	1710	0749	1645
05	0806	1659	0743	1740	0658	1819	0600	1900	0510	1938	0440	2011	0445	2018	0516	1949	0553	1857	0630	1800	0711	1709	0750	1645
06	0806	1700	0741	1741	0656	1821	0558	1901	0508	1939	0440	2012	0446	2017	0517	1948	0554	1855	0631	1758	0713	1708	0751	1644
07	0806	1701	0740	1743	0655	1822	0556	1902	0507	1941	0440	2012	0447	2017	0518	1946	0556	1853	0632	1756	0714	1706	0752	1644
08	0806	1702	0739	1744	0653	1823	0555	1904	0506	1942	0439	2013	0447	2016	0519	1945	0557	1852	0634	1754	0716	1705	0753	1644
09	0805	1703	0737	1745	0651	1825	0553	1905	0504	1943	0439	2014	0448	2016	0521	1944	0558	1850	0635	1753	0717	1704	0754	1644
10	0805	1704	0736	1747	0649	1826	0551	1906	0503	1944	0439	2014	0449	2015	0522	1942	0559	1848	0636	1751	0718	1703	0755	1644
11	0805	1705	0735	1748	0647	1827	0549	1908	0502	1945	0439	2015	0450	2015	0523	1941	0600	1846	0638	1749	0720	1702	0756	1644
12	0804	1707	0733	1750	0645	1829	0547	1909	0501	1947	0438	2015	0451	2014	0524	1939	0602	1844	0639	1747	0721	1700	0757	1644
13	0804	1708	0732	1751	0644	1830	0546	1910	0459	1948	0438	2016	0451	2013	0525	1937	0603	1842	0640	1745	0723	1659	0758	1644
14	0803	1709	0730	1753	0642	1831	0544	1911	0458	1949	0438	2016	0452	2013	0527	1936	0604	1840	0642	1744	0724	1658	0759	1644
15	0803	1710	0729	1754	0640	1833	0542	1913	0457	1950	0438	2017	0453	2012	0528	1934	0605	1838	0643	1742	0725	1657	0759	1645
16	0802	1712	0727	1756	0638	1834	0540	1914	0456	1951	0438	2017	0454	2011	0529	1933	0606	1836	0644	1740	0727	1656	0800	1645
17	0801	1713	0725	1757	0636	1835	0539	1915	0455	1952	0438	2017	0455	2010	0530	1931	0608	1834	0645	1738	0728	1655	0801	1645
18	0801	1714	0724	1758	0634	1837	0537	1917	0454	1954	0438	2018	0456	2010	0531	1929	0609	1832	0647	1737	0729	1654	0802	1646
19	0800	1716	0722	1800	0632	1838	0535	1918	0453	1955	0439	2018	0457	2009	0533	1928	0610	1831	0648	1735	0731	1653	0803	1646
20	0759	1717	0721	1801	0630	1839	0533	1919	0452	1956	0439	2018	0458	2008	0534	1926	0611	1829	0651	1732	0732	1653	0803	1646
21	0759	1718	0719	1803	0628	1841	0532	1920	0451	1957	0439	2019	0459	2007	0535	1924	0613	1827	0651	1732	0733	1652	0803	1647
22	0758	1720	0717	1804	0627	1842	0530	1922	0450	1958	0439	2019	0500	2006	0536	1923	0614	1825	0652	1730	0735	1651	0804	1647
23	0757	1721	0716	1805	0625	1843	0528	1923	0449	1959	0439	2019	0501	2005	0537	1921	0615	1823	0654	1728	0736	1650	0804	1648
24	0756	1722	0714	1807	0623	1844	0527	1924	0448	2000	0440	2019	0502	2004	0539	1919	0616	1821	0655	1727	0737	1650	0805	1648
25	0755	1724	0712	1808	0621	1846	0525	1926	0447	2001	0440	2019	0503	2003	0540	1917	0617	1819	0656	1725	0739	1649	0805	1649
26	0754	1725	0711	1810	0619	1847	0523	1927	0446	2002	0440	2019	0504	2002	0541	1916	0619	1817	0658	1724	0740	1648	0805	1650
27	0753	1727	0709	1811	0617	1848	0522	1928	0446	2003	0441	2019	0505	2002	0542	1914	0620	1815	0659	1722	0741	1648	0806	1650
28	0752	1728	0707	1812	0615	1850	0520	1929	0445	2004	0442	2019	0507	2000	0544	1912	0621	1813	0700	1720	0742	1647	0806	1651
29	0751	1730	0705	1813	0613	1851	0519	1931	0444	2005	0441	2019	0508	1958	0545	1910	0622	1811	0702	1719	0744	1647	0806	1652
30	0750	1731	0704	1814	0611	1852	0517	1932	0444	2006	0442	2019	0509	1957	0546	1908	0624	1809	0703	1717	0745	1646	0806	1653
31	0749	1732			0610	1853	0443	2007					0510	1956	0547	1906			0704	1716			0806	1654

Add one hour for daylight time, if and when in use.

Day	Jan.			Feb.			Mar.			Apr.			May			June			July			Aug.			Sept.			Oct.			Nov.			Dec.		
	Rise	Set	h m	Rise	Set	h m	Rise	Set	h m	Rise	Set	h m	Rise	Set	h m																					
01	0810	1659	0751	1738	0709	1818	0611	1858	0520	1936	0446	2011	0447	2022	0515	1958	0628	1811	0709	1718	0628	1811	0709	1718	0628	1811	0709	1718	0628	1811	0709	1718	0628	1811		
02	0810	1700	0750	1739	0707	1819	0609	1900	0518	1938	0446	2012	0447	2021	0516	1957	0553	1906	0630	1809	0711	1717	0630	1809	0711	1717	0630	1809	0711	1717	0630	1809				
03	0810	1701	0749	1741	0705	1820	0608	1901	0517	1939	0445	2012	0448	2021	0517	1955	0554	1904	0631	1807	0712	1716	0631	1807	0712	1716	0631	1807	0712	1716	0631	1807				
04	0809	1702	0747	1742	0704	1822	0606	1902	0515	1940	0445	2013	0449	2021	0519	1954	0556	1903	0632	1806	0713	1714	0632	1806	0713	1714	0632	1806	0713	1714	0632	1806				
05	0809	1703	0746	1744	0702	1823	0604	1903	0514	1941	0445	2014	0449	2021	0520	1953	0557	1901	0633	1804	0713	1714	0633	1804	0713	1714	0633	1804	0713	1714	0633	1804				
06	0809	1704	0745	1745	0700	1824	0602	1905	0512	1943	0444	2015	0450	2020	0521	1951	0558	1859	0635	1802	0716	1712	0635	1802	0716	1712	0635	1802	0716	1712	0635	1802				
07	0809	1705	0743	1746	0658	1826	0600	1906	0511	1944	0444	2015	0451	2020	0522	1950	0559	1857	0636	1800	0718	1710	0636	1800	0718	1710	0636	1800	0718	1710	0636	1800				
08	0809	1706	0742	1748	0656	1827	0558	1907	0510	1945	0443	2016	0451	2019	0523	1948	0600	1855	0637	1758	0719	1709	0637	1758	0719	1709	0637	1758	0719	1709	0637	1758				
09	0808	1707	0741	1749	0654	1828	0557	1908	0508	1946	0443	2017	0452	2019	0524	1947	0603	1853	0639	1756	0720	1708	0639	1756	0720	1708	0639	1756	0720	1708	0639	1756				
10	0808	1708	0739	1751	0653	1830	0555	1910	0507	1947	0443	2017	0453	2018	0526	1945	0603	1851	0640	1755	0722	1707	0640	1755	0722	1707	0640	1755	0722	1707	0640	1755				
11	0808	1709	0738	1752	0651	1831	0553	1911	0506	1949	0443	2018	0454	2018	0527	1944	0604	1849	0641	1753	0723	1706	0641	1753	0723	1706	0641	1753	0723	1706	0641	1753				
12	0807	1711	0736	1754	0649	1832	0551	1912	0505	1950	0443	2018	0455	2017	0528	1942	0605	1847	0642	1751	0724	1704	0642	1751	0724	1704	0642	1751	0724	1704	0642	1751				
13	0807	1712	0735	1755	0647	1834	0549	1914	0503	1951	0443	2019	0456	2017	0529	1941	0606	1846	0644	1749	0726	1703	0644	1749	0726	1703	0644	1749	0726	1703	0644	1749				
14	0806	1713	0733	1757	0645	1835	0548	1915	0502	1952	0442	2019	0456	2016	0530	1939	0608	1844	0645	1747	0727	1702	0645	1747	0727	1702	0645	1747	0727	1702	0645	1747				
15	0806	1714	0732	1758	0643	1836	0546	1916	0501	1953	0442	2020	0457	2015	0532	1938	0609	1842	0646	1746	0729	1701	0646	1746	0729	1701	0646	1746	0729	1701	0646	1746				
16	0805	1716	0730	1759	0641	1838	0544	1917	0500	1955	0442	2020	0458	2014	0533	1936	0610	1840	0648	1744	0730	1700	0648	1744	0730	1700	0648	1744	0730	1700	0648	1744				
17	0805	1717	0729	1801	0640	1839	0542	1919	0459	1956	0442	2021	0459	2014	0534	1934	0611	1838	0649	1742	0731	1659	0649	1742	0731	1659	0649	1742	0731	1659	0649	1742				
18	0804	1718	0727	1802	0638	1840	0541	1920	0458	1957	0443	2021	0500	2013	0535	1933	0613	1836	0650	1740	0733	1658	0650	1740	0733	1658	0650	1740	0733	1658	0650	1740				
19	0803	1720	0726	1804	0636	1842	0539	1921	0457	1958	0443	2021	0501	2012	0536	1931	0614	1834	0652	1739	0734	1657	0652	1739	0734	1657	0652	1739	0734	1657	0652	1739				
20	0803	1721	0724	1805	0634	1843	0537	1922	0456	1959	0443	2022	0502	2011	0538	1929	0615	1832	0653	1737	0735	1657	0653	1737	0735	1657	0653	1737	0735	1657	0653	1737				
21	0802	1722	0722	1806	0632	1844	0536	1924	0455	2000	0443	2022	0503	2010	0539	1928	0616	1830	0654	1735	0737	1656	0654	1735	0737	1656	0654	1735	0737	1656	0654	1735				
22	0801	1724	0721	1808	0630	1845	0534	1925	0454	2001	0443	2022	0504	2009	0540	1926	0617	1828	0656	1734	0738	1655	0656	1734	0738	1655	0656	1734	0738	1655	0656	1734				
23	0800	1725	0719	1809	0628	1847	0532	1926	0453	2002	0443	2022	0505	2008	0541	1924	0619	1826	0657	1732	0739	1654	0657	1732	0739	1654	0657	1732	0739	1654	0657	1732				
24	0759	1726	0717	1811	0626	1848	0531	1928	0452	2003	0444	2022	0506	2007	0542	1922	0620	1824	0658	1731	0741	1654	0658	1731	0741	1654	0658	1731	0741	1654	0658	1731				
25	0758	1728	0716	1812	0625	1849	0529	1929	0451	2004	0444	2022	0507	2006	0544	1921	0621	1823	0700	1729	0742	1653	0700	1729	0742	1653	0700	1729	0742	1653	0700	1729				
26	0757	1729	0714	1813	0623	1851	0527	1930	0450	2005	0444	2022	0508	2005	0545	1919	0622	1821	0701	1727	0743	1652	0701	1727	0743	1652	0701	1727	0743	1652	0701	1727				
27	0756	1731	0712	1815	0621	1852	0526	1931	0449	2006	0445	2022	0510	2004	0546	1917	0623	1819	0702	1726	0744	1652	0702	1726	0744	1652	0702	1726	0744	1652	0702	1726				
28	0755	1732	0711	1816	0619	1853	0524	1933	0448	2007	0445	2022	0511	2003	0547	1915	0625	1817	0704	1725	0745	1651	0704	1725	0745	1651	0704	1725	0745	1651	0704	1725				
29	0754	1733	0711	1816	0618	1854	0523	1934	0448	2008	0446	2022	0512	2002	0549	1914	0626	1815	0705	1724	0747	1651	0705	1724	0747	1651	0705	1724	0747	1651	0705	1724				
30	0753	1735	0710	1817	0615	1856	0521	1935	0448	2009	0446	2022	0513	2000	0550	1912	0627	1813	0706	1723	0748	1650	0706	1723	0748	1650	0706	1723	0748	1650	0706	1723				
31	0752	1736	0710	1817	0613	1857	0519	1936	0447	2010	0447	2022	0514	1959	0551	1910	0627	1813	0708	1722	0749	1649	0708	1722	0749	1649	0708	1722	0749	1649	0708	1722				

Add one hour for daylight time, if and when in use.

[Back to form](#)

Aviation Risk Management

Aerial Missions that may Require Additional Risk Assessment

1) Aerial tactical operations after sunset:

Aircraft operations are authorized to be conducted only from 30 minutes before official sunrise to 30 minutes after official sunset. However, aircraft operations on the B-D Nat'l Forest of a tactical nature should, in general, only be conducted until official sunset. Exceptions to this should be rare and are left to the flight manager and pilot to decide, through the use of a risk management process, when it is necessary and justified to continue tactical work after sunset. The intent of this protocol is to conduct high task load/high concentration operations during low-light conditions only when deemed absolutely necessary and when the additional hazards of such conditions can be mitigated.

2) Aerial GPS Mapping/Sustained Low-level Helicopter Recon:

GPS Mapping and Sustained Low-level helicopter recon often involve precision aircraft maneuvering at low speeds at low levels. Efforts should be taken to limit the frequency and duration of operations of this type. In addition, passengers are limited to only those necessary to perform the specific mission of mapping or low-level recon. Passengers that may need reconnaissance information that could be obtained from a higher level or lower risk flight profile should not be on board the aircraft during the mapping or low-level portion of flight. Generally mapping or sustained low-level helicopter recon of a non emergency nature can be planned in advance with the appropriate written flight request.

3) Rapid Refueling of Helicopters:

Rapid Refueling of Helicopters requires a request from the Government and a specific notification to Aviation Management. Rapid refueling is allowed on the B-D as long as contract and NFPA 407 specifications are met.

4) Medivac by Helicopters

Helicopter medivac is a situation where mission focus and emotional response have a high potential to supersede the risk management process. All helicopter medivac's using a non agency Life Flight on the B-D Nat'l Forest shall be coordinated through DDC with the exception of incident management teams, and will include notification to Forest Aviation Management. Incoming incident management teams will be briefed on Life Flight procedures and the use of EMS frequencies to coordinate with medivac aircraft. All communication with non agency medivac aircraft will be coordinated on State EMS A/G TAN Frequency 155.340 TX/RX Narrowband. **Air medivac operations should also include a rendezvous point (Helibase or other spot close to the scene) for the non agency medivac aircraft to land and receive a briefing so communication can be confirmed prior to passenger pick up. If positive communication is established and the situation warrants, the life flight aircraft can be sent direct to the scene, but a briefing at a pre determined rendezvous point should be the desired method of contact for a non agency medivac aircraft.**

Risk Analysis: The 4 M's

	YES	NO
METHOD		
1. Is there an alternative method which would accomplish the mission more safely and/or efficiently (including accomplishment by ground methods)?		
2. Is the method selected approved and do detailed instructions for safe accomplishment exist?		
3. Have adequate flight following and communications methods been established?		
MEDIUM		
1. Can factors of terrain, altitude, temperature, or weather which could adversely affect the mission's success be mitigated?		
2. Will the mission be conducted at low (below 500' AGL) or high altitudes? Can the same objective be achieved by flying at a higher altitude AGL?		
3. If low-level flight, have all known aerial hazards been identified during the planning process and are they known to all participants?		
4. If there is a potential for an airspace conflict (military, media, or sightseeing aircraft), have mitigating measures been taken?		
5. Have adequate landing areas been identified and/or improved to minimum requirements?		
MAN		
1. Is the Pilot properly carded for the mission to be conducted?		
2. Will the flight be conducted within the Pilot flight time/duty day requirements and limitations?		
3. Have the minimum number of personnel necessary to accomplish the mission safely been assigned, and do they meet personnel qualifications and experience requirements?		
4. Will adequate personnel (flight and ground crew) and Pilot briefings be conducted prior to the flight?		
5. Are users aware that the Pilot-in-command has final authority over any operations conducted involving the aircraft or its occupants?		
MACHINE		
1. Is the aircraft capable of performing the mission in the environment (altitude, temperature, terrain, weather) where the operation will be conducted?		
2. Is the aircraft properly carded for the intended mission?		

Astronomical
U. S. Naval Observatory
Washington, DC 20392-5420

PHILIPSBURG, MONTANA
Rise and Set for the Sun for 2015
Mountain Standard Time

Applications Dept.
Location: W113 18, N46 20

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.								
Rise	Set	Rise	Set	Rise	Set															
h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m							
01	0816	1657	0757	1738	0713	1819	0613	1902	0520	1942	0445	2018	0353	1912	0632	1813	0714	1719	0756	1649
02	0816	1658	0755	1739	0711	1821	0611	1903	0518	1943	0444	2019	0352	1910	0633	1811	0716	1717	0757	1648
03	0816	1659	0754	1741	0709	1822	0609	1904	0517	1944	0444	2019	0351	1908	0634	1809	0717	1716	0758	1648
04	0816	1700	0753	1742	0707	1823	0607	1906	0515	1946	0443	2020	0350	1906	0635	1808	0719	1714	0759	1647
05	0816	1701	0751	1744	0705	1825	0605	1907	0514	1947	0443	2021	0349	1905	0637	1806	0721	1713	0800	1647
06	0816	1702	0750	1745	0703	1826	0604	1909	0512	1948	0442	2022	0348	1903	0638	1804	0721	1712	0801	1647
07	0816	1703	0749	1747	0702	1828	0602	1910	0511	1950	0442	2023	0347	1901	0639	1802	0723	1710	0802	1647
08	0815	1705	0747	1748	0700	1829	0600	1911	0509	1951	0442	2023	0346	1899	0641	1800	0724	1709	0803	1647
09	0815	1706	0746	1750	0658	1830	0558	1913	0508	1952	0441	2024	0345	1897	0642	1758	0726	1708	0804	1647
10	0815	1707	0744	1751	0656	1832	0556	1914	0507	1953	0441	2024	0345	1895	0643	1756	0727	1706	0805	1647
11	0814	1708	0743	1753	0654	1833	0554	1915	0505	1955	0441	2025	0344	1893	0645	1754	0729	1705	0806	1647
12	0814	1709	0741	1754	0652	1835	0552	1917	0504	1956	0441	2026	0343	1891	0646	1752	0730	1704	0807	1647
13	0813	1711	0740	1756	0650	1836	0550	1918	0503	1957	0441	2026	0342	1889	0648	1751	0732	1703	0808	1647
14	0813	1712	0738	1757	0648	1837	0549	1919	0501	1958	0440	2027	0341	1887	0649	1749	0733	1702	0809	1647
15	0812	1713	0737	1759	0646	1839	0547	1921	0500	2000	0440	2027	0340	1885	0650	1747	0734	1701	0809	1647
16	0812	1715	0735	1800	0644	1840	0545	1922	0459	2001	0440	2028	0339	1883	0652	1745	0736	1700	0810	1647
17	0811	1716	0733	1802	0642	1842	0543	1923	0458	2002	0440	2028	0338	1881	0653	1743	0737	1659	0811	1648
18	0810	1717	0732	1803	0640	1843	0541	1925	0457	2003	0441	2028	0337	1879	0654	1742	0739	1658	0812	1648
19	0810	1719	0730	1805	0639	1844	0540	1926	0456	2004	0441	2029	0336	1877	0656	1740	0740	1657	0812	1648
20	0809	1720	0728	1806	0637	1846	0538	1927	0455	2005	0441	2029	0335	1875	0657	1738	0741	1656	0813	1649
21	0808	1721	0727	1808	0635	1847	0536	1929	0454	2007	0441	2029	0334	1873	0659	1736	0743	1655	0813	1649
22	0807	1723	0725	1809	0633	1848	0534	1930	0453	2008	0441	2029	0333	1871	0700	1735	0744	1654	0814	1650
23	0806	1724	0723	1810	0631	1850	0533	1931	0452	2009	0441	2029	0332	1869	0701	1733	0746	1653	0814	1650
24	0805	1726	0722	1812	0629	1851	0531	1933	0451	2010	0442	2029	0331	1867	0703	1731	0747	1653	0815	1651
25	0804	1727	0720	1813	0627	1852	0529	1934	0450	2011	0442	2029	0330	1865	0704	1730	0748	1652	0815	1651
26	0803	1729	0718	1815	0625	1854	0528	1935	0449	2012	0443	2030	0329	1863	0706	1728	0749	1651	0815	1652
27	0802	1730	0716	1816	0623	1855	0526	1937	0448	2013	0443	2029	0328	1861	0707	1726	0751	1651	0816	1653
28	0801	1732	0714	1818	0621	1856	0524	1938	0448	2014	0443	2029	0327	1859	0708	1725	0752	1650	0816	1654
29	0800	1733	0712	1819	0619	1858	0523	1939	0447	2015	0444	2029	0326	1857	0710	1723	0753	1650	0816	1654
30	0759	1735	0710	1820	0617	1859	0521	1941	0446	2016	0444	2029	0325	1855	0711	1722	0754	1649	0816	1654
31	0758	1736	0708	1821	0615	1900	0519	1942	0445	2017	0444	2029	0324	1853	0713	1720	0755	1648	0816	1654

Add one hour for daylight time, if and when in use.

Mission Risk Analysis

- Incident Commanders need to have a sound tactical plan that is capable of being implemented and accomplished.
- Plan must include a valid justification for utilization of aviation resources.
- Monitor and re-evaluate the decision for utilization of aviation resources on an incident and be responsive to changes and effectiveness.
- Discuss with incoming Incident Management Teams

Recommendations:

Begin to increase awareness at existing pre-season meetings and training. This should be an emphasis item for various workshops, fireline refreshers, contract pre-work meetings, local unit fire preparedness events and in-briefings with non-local resources. Local partners need a stake in the decision making and planning process.

If you have any questions please contact the individuals below

Mike (Goke) Goicoechea Forest Fire Management Officer 406.683.3975

Dennis A. Morton Forest Aviation Officer 406.660.2318

MISSION Be specific	Water bucket Operations (including Helitanker)	Crew & overhead transport
IDENTIFY HAZARDS Consider all aspects of current & future situations, environmental & known historical problem areas. <u>huMan, Machine, Medium, Mission</u>	<ol style="list-style-type: none"> 1. High elevation operating area 2. Airspace intrusions 3. Severe weather (wind, down drafts, etc.) 4. Limited visibility due to smoke/fog 5. Operating over open water 	<ol style="list-style-type: none"> 1. High elevation operating area 2. Airspace intrusions 3. Severe weather (wind, down drafts, etc.) 4. Limited visibility due to smoke/fog 5. Rotors
ASSESS HAZARDS Determine the risks. Assess the impact of each hazard in terms of <u>probability & effect.</u>	<ol style="list-style-type: none"> 1. Frequent, Critical 2. Occasional, Critical 3. Occasional, Moderate 4. Occasional, Critical 5. Frequent, Critical 	<ol style="list-style-type: none"> 1. Frequent, Critical 2. Occasional, Critical 3. Occasional, Moderate 4. Occasional, Critical 5. Frequent, Critical
DEVELOP CONTROLS & MAKE RISK DECISION Develop control measures that eliminate the hazard or reduce the risk. As control measures are developed, risks are re-evaluated until all risks are reduced to a level where benefits outweigh potential cost.	<ol style="list-style-type: none"> 1. Correct load calcs as needed for elevation and temperature. Proper bucket size for dip site elev. 2. Order TFR, document intrusions, notify Forest Aviation Officer/Unit Aviation Manager 3. Request weather updates from IMET 4. Fly only when visibility meets or is greater than minimums 5. Pilots wear PFDS Develop water rescue plan Maintain glide distance to shore 	<ol style="list-style-type: none"> 1. Correct load calcs as needed for elevation and temperature. 2. Order TFR, document intrusions, notify Forest Aviation Officer/Unit Aviation Manager 3. Request weather updates from IMET 4. Fly only when visibility meets or is greater than minimums 5. Utilize DECK, crew manifesting & loading area
IMPLEMENT CONTROLS Put controls in place to eliminate the hazards or reduce the risk.	<ol style="list-style-type: none"> 1. Review load calcs daily, check math & specifics Ensure contract compliance on bucket size 2. Ensure TFR specifics are correct 3. Return aircraft to base prior to severe weather 4. Ensure VFR conditions for all aircraft 5. Periodically check pilots for PFDS Implement water rescue plan if necessary 	<ol style="list-style-type: none"> 1. Review load calcs daily, check math & specifics 2. Ensure TFR specifics are correct 3. Return aircraft to base prior to severe weather 4. Ensure VFR conditions for all aircraft 5. Helibase and helispot management
SUPERVISE & EVALUATE Enforce standards & controls. Evaluate the effectiveness of controls and adjust/update as necessary. Review process as necessary.	Evaluate daily and make decision.	Evaluate daily and make decision.
NOTES Document review of hazards, controls, successes and problems.		

Mission Risk Analysis

MISSION Be specific	Fixed-wing Retardant	Fixed-wing Air Tactical
IDENTIFY HAZARDS Consider all aspects of current & future situations, environmental & known historical problem areas. huMan, Machine, Medium, Mission	<ol style="list-style-type: none"> 1. High elevation operating area 2. Airspace intrusions 3. Severe weather (wind, down drafts, etc.) 4. Limited visibility due to smoke/fog 5. Dropping of retardant in exclusion zone 	<ol style="list-style-type: none"> 1. High elevation operating area 2. Airspace intrusions 3. Severe weather (wind, down drafts, etc.) 4. Limited visibility due to smoke/fog
ASSESS HAZARDS Determine the risks. Assess the impact of each hazard in terms of probability & effect.	<ol style="list-style-type: none"> 1. Frequent, Critical 2. Occasional, Critical 3. Occasional, Moderate 4. Occasional, Critical 5. Remote, Critical 	<ol style="list-style-type: none"> 1. Frequent, Critical 2. Occasional, Critical 3. Occasional, Moderate 4. Occasional, Critical
DEVELOP CONTROLS & MAKE RISK DECISION Develop control measures that eliminate the hazard or reduce the risk. As control measures are developed, risks are re-evaluated until all risks are reduced to a level where benefits outweigh potential cost.	<ol style="list-style-type: none"> 1. Use Lead Plane and other Air Tactical Supervision 2. Order TFR Document intrusions, notify Forest Aviation Officer/Unit Aviation Manager 1. Request weather updates from IMET 2. Fly only when visibility meets or is greater than minimums 3. Have retardant avoidance areas pre-identified Coordinate with local fire management to alleviate mishaps by identifying procedures to avoid mis-application of retardant 	<ol style="list-style-type: none"> 1. Use Type 1, pressurized aircraft when operating above 12,500' or ensure oxygen system if not pressurized 2. Order TFR Document intrusions, notify Forest Aviation Officer/Unit Aviation Manager 3. Request weather updates from IMET 4. Fly only when visibility meets or is greater than minimums
IMPLEMENT CONTROLS Put controls in place to eliminate the hazards or reduce the risk.	<ol style="list-style-type: none"> 1. Order LP to be available for AT ops 2. See and avoid All aviation personnel alert for intrusions Ensure TFR specs are correct 3. Use LP to ensure safety of AT 4. Fly only when visibility permits 5. Follow established procedures 	<ol style="list-style-type: none"> 1. Utilize Type 1 aircraft 2. See and avoid All aviation personnel alert for intrusions Ensure TFR specs are correct 3. ATGS monitor weather 4. Fly only when visibility permits
SUPERVISE & EVALUATE Enforce standards & controls. Evaluate the effectiveness of controls and adjust/update as necessary. Review process as necessary.	Evaluate daily and make decision. If mishap occurs follow established guidelines for reporting and monitoring as per the Implementation Guide for Aerial Application of Fire Retardant 3/2012	Evaluate daily and make decision.
NOTES Document review of hazards, controls, successes and problems.		

USDA Forest Service

Beaverhead-Deerlodge NF

Fire and Aviation Management Briefing Paper

Date: June 01, 2014

Topic: Transfer of risk from ground resources to aviators.

Issue: Risk Management for delivery of retardant and water by aircraft needs to be developed to ensure that a shift in risk from ground suppression resources to aviation resources does not occur. As with any situation effective communication will determine the success or failure of your endeavor.

Background: Past fire seasons have seen an increased demand for fire fighting resources of all types. Often aircraft were utilized in a manner that placed the pilots in hazardous situations without an accurate risk evaluation for the aerial resources being utilized in that operation. This briefing paper comes as an attempt to remind operational personnel that hazard analysis and risk assessments for aviators should be conducted for proper utilization of aviation resources. This is not a new issue. There are several documents, guides, and handbooks to help provide guidance on this topic.

Examples:

- Airtankers building long stretches of line without ground resources present.
- Utilizing aviation resources because the terrain is too rough for ground resources.
- Fire behavior is too extreme for effective aerial delivery.
- Political pressure to use aircraft when efficiency has been lost.

Key Points:

- Communication is critical, if you are not included then you are not communicating.
- Preseason discussions with key agency's and partners.(pre-work meetings, workshops, refreshers).
- During incident (IC, Operations, ATGS, Pilots, SOFR, local unit, air to ground) After Action Review (AAR).
- Use extra column on ICS form 215A for Aviation Risk Management to be discussed at all planning meetings.

Mission Risk Analysis

Retardant Use on the Beaverhead-Deerlodge NF

In December of 2011, the Chief of the Forest Service signed the National Aerial Application of Fire Retardant on National Forest System Land Record of Decision. This decision stated the following: “Aerial retardant drops are not allowed in mapped avoidance areas for threatened, endangered, proposed, candidate or sensitive (TEPCS) species or in waterways. This national direction is mandatory and would be implemented **except** in cases where **human life or public safety** is threatened and retardant use within the avoidance areas could be **reasonably expected** to alleviate that threat.” Avoid aerial application of wildland fire chemicals within 300 feet of waterways and any ground application of wildland fire chemicals into waterways. Application of retardant on the B-D will continue as in the past only now we have identified specific avoidance areas on the forest. These areas are identified on quad maps that will be supplied to all incoming teams and IA resources assigned to fire suppression on the B-D.

Reporting Requirements of Wildland Fire Chemicals into Waterways: Any fire chemicals aerially applied into a waterway or within 300 feet of a waterway require prompt upward reporting to incident management and agency administrators. Notifications will also be made for any spills or ground applications of fire chemicals into waterways or with potential to enter the waterway.

If it is believed that fire chemicals have been introduced into a waterway or buffer zone, personnel should immediately inform their supervisor. The incident or host authorities must immediately contact appropriate regulatory agencies and specialists within the local jurisdiction.

Initial notifications of wildland fire chemical mishaps will be reported as soon as possible to the Forest Aviation Officer and/or Dillon Interagency Dispatch and they will contact WFCS Fire Chemical Project Leader in Missoula, Montana at 406-329-4859 (if no answer please leave message) or to individuals listed on website referenced below. Include the date, location, and extent of the mishap.

All information, including reporting form and instructions, are posted on the web site at: <http://www.fs.fed.us/fire/retardant/index.html>

MISSION Be specific	Hot Refueling - Closed Circuit	Hot Refueling - Open Port
IDENTIFY HAZARDS Consider all aspects of current & future situations, environmental & known historical problem areas. <u>huMan, Machine, Medium, Mission</u>	1. Fuel spills Equipment Failure Fuel Fire 2. Landing near fuel truck Pilot Fatigue	1. Fuel spills Equipment Failure Fuel Fire 2. Landing near fuel truck Pilot Fatigue
ASSESS HAZARDS Determine the risks. Assess the impact of each hazard in terms of <u>probability & effect</u> .	1. Unlikely/Critical 2. Frequent/Critical	1. Unlikely/Critical 2. Frequent/Critical
DEVELOP CONTROLS & MAKE RISK DECISION Develop control measures that eliminate the hazard or reduce the risk. As control measures are developed, risks are re-evaluated until all risks are reduced to a level where benefits outweigh potential cost.	1. Inspect service Truck equipment, vendor hot fueling plan and NFPA 407 standards. 2. Evaluate daily based on fire and tactics Approved by AOBD or ordered by HLCO/ATGS Hot fuel only during time critical ops. Aircraft will be shut down after 4 hours of continuous operation Move fuel trucks away from landing pad.	1. Inspect service Truck equipment, vendor hot fueling plan and NFPA 407 standards. 2. Evaluate daily based on fire and tactics Approved by AOBD or ordered by HLCO/ATGS Hot fuel only during time critical ops. Aircraft will be shut down after 4 hours of continuous operation. Move fuel trucks away from landing pad.
IMPLEMENT CONTROLS Put controls in place to eliminate the hazards or reduce the risk.	Brief pilots and managers on hot fueling procedures and protocols Hot fuel based on fire behavior, high altitude operating conditions and fuel downloading to carry an effective load	Brief pilots and managers on hot fueling procedures and protocols Hot fuel based on fire behavior, high altitude operating conditions and fuel downloading to carry an effective load
SUPERVISE & EVALUATE Enforce standards & controls. Evaluate the effectiveness of controls and adjust/update as necessary. Review process as necessary.	Evaluate daily and make decision.	Evaluate daily and make decision.
NOTES Document review of hazards, controls, successes and problems.		

Aviation Fuel Sources

Location/FBO	Fuel Types	Phone Numbers
Dillon Airport Dillon, MT <i>DLN</i>	Jet A / Av Gas	Dillon Flying Service (406) 683-5242 or (406) 660-2300
Deer Lodge Airport Deer Lodge, MT 38S	Jet A / Av Gas (Jet A call ahead)	TC Aviation (406) 490-3071 or (406) 490-0297
Bert Mooney Airport Butte, MT <i>BTM</i>	Jet A / Av Gas	Butte Aviation Inc (406) 494-6694
Helena Regional Helena, MT <i>HLN</i>	Jet A / Av Gas	Exec Air Montana (406) 442-2190 or 800-513-2190
Twin Bridges Airport Twin Bridges, MT <i>7S1</i>	Jet A / Av Gas (Jet A call ahead)	Ruby Valley Aviation (406) 684-5335 or (406) 596-1129
Ennis-Big Sky Ennis, MT <i>EKS</i>	Jet A / Av Gas (Call for Jet A)	Choice Aviation (406) 570-7680 or (406) 682-7502
Ravalli County Airport Hamilton, MT 6S5	Jet A / Av Gas	Choice Aviation (406) 363-6471 or (406) 375-9149
Bozeman Yellowstone Bozeman, MT <i>BZN</i>	Jet A / Av Gas	Arlin's A/C Service (406) 388-1351
		Yellowstone Jet Center (406) 388-4152 or 800-700-5381
Yellowstone Airport West Yellowstone, MT <i>WYS</i>	Jet A / Av Gas	Yellowstone Aviation (406) 646-7359 or (406) 646-7631
Missoula International Missoula, MT <i>MSO</i>	Jet A / Av Gas	Minuteman Jet Center (406) 728-9363 or 800-926-7481
		Northstar Jet (406) 721-8886 800-735-4476

Fire Traffic Area (FTA) 01 May 2013

***** Clearance is required to enter the FTA *****

Initial Radio Contact: 12 nm on assigned air tactical frequency.
No Radio Contact: Hold a minimum of 7 nm from the incident.

Note: Airtanker maneuvering altitude determines minimum airtanker and ATGS orbit altitudes. Assigned altitudes may be higher and will be stated as MSL.

Note 1
ATGS Orbit Minimum 2500' AGL

Note 2
Airtanker Orbit Minimum 1500' AGL
Airtanker Maneuvering Maximum 1000' AGL

Note 3
Max 500' AGL Helicopters

Note 1 1000' min. separation between ATGS orbit and airtanker orbit altitude.
Note 2 500' min. separation between airtanker orbit and maneuvering altitude.
Note 3 On arrival reduce speed to cross 7 nm at assigned altitude and 150 KIAS or less.

*** Helicopters:** Fly assigned altitudes and routes.
*** Media:** Maintain VFR separation above highest incident aircraft or position and altitude as assigned by controlling aircraft.

Airtanker Base As Assigned	Air Guard 168.625 Tx Tone 110.9	Air To Air As Assigned	National Flight Following 168.650 Tone 110.9 TX and RX
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Local Area Information

R1 Aviation Phone List

Maggie M. Doherty

Regional Aviation Officer
Office 406-329-4903
Cell 406-370-3340

Gary Boyd

Regional Aviation Safety MGR.
Office 406-329-3235
Cell 406-370-9707

John Harris

R-1 Helicopter Inspector Pilot
Office 406-329-4943
Cell 406-370-3342
Fax 406-329-4943

Dave Crumb

Helicopter Ops Specialist
Office 406-329-4984
Cell 208-315-2438

Jeff McGinley

R-1 Aviation Contracting Officer
Office 208-387-5350
Cell 208-591-0471

Ken Wabaunsee

R-1 Fixedwing Specialist
Office 406-329-4914
Cell 406-370-5896

Jeff Holwick

Aircraft Maintenance Inspector
Office 406-329-3120
Cell 406-544-4072
FAX 406-329-3319

John Farro

Aircraft Maintenance Inspector
Office 406-329-3120
Cell 406-370-3347

Services and accommodation can be found in the following towns located around the Beaverhead-Deerlodge National Forest. The biggest city in the area is Butte and offers the largest numbers of hotel, restaurant, and car rental establishments in the area. The distance from Dillon to Butte is only 58 miles North on I-15, then 6 miles East bound on I-90. Butte offers overnight accommodations and restaurants. The Bert Mooney Airport (**BTM**) offers areas for aircraft repair, commercial air travel, and flight information including weather and NOTAMS.

Twin Bridges is 28 miles North of Dillon on HWY 41. The Twin Bridges Airport (**7S1**) offers limited services, AVGAS and Jet A, and no car rental.

Ennis is 75 miles North East of Dillon, North on Hwy 41 then East on Hwy 287. Ennis has 2 airports. One airport is private and not listed. The other, (**5U3**) has AVGAS and Jet A available.

Dell is 40 miles south of Dillon on I-15. The Dell Airport (**4U9**) has no Services available.

The **Wisdom airstrip (7S4)** is located just outside Wisdom, MT, there are no services available. There is also a helicopter pad located at the Wisdom Ranger District. The pad will support Type II helicopters, the lat/long is 45° 36.624' N X 113° 26.728' W

There is also an air strip (**02T**) in **Wise River**, MT, near the Wise River Ranger District.

Bowman Field located outside of **Anaconda (3U3)** is 80 miles from Dillon

Philipsburg, MT, (**U05**) is 110 miles from Dillon No services available.

Lodging

Motels in Butte:

Best Western	406-494-3500
Budget Motel	406-723-4346
Comfort Inn	406-494-8850
Days Inn	406-494-7000
Hampton Inn	406-494-2250
Holiday Inn	406-782-2000
Motel 6	406-782-5678
Quality Inn	406-494-7800
Super 8	406-494-6000

Motels in Philipsburg:

Broadway Hotel	406-859-8000
Inn at Philipsburg	406-859-3959

Motels in Whitehall:

Rice Motel	406-287-3895
Rodeway Inn	406-287-5588

Motel in Wisdom:

Pioneer Mountain	406-689-3229
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Motels in Dillon:

America's Best Value	406-683-4288
Best Western	406-683-4214
Comfort Inn	406-683-6831
Guest House	406-683-3636
Motel 6	406-683-5555
Sundowner	406-683-2375

Motels in Ennis:

Fan Mountain Inn	406-682-5200
Rainbow Valley	406-682-4264
Riverside Motel	406-682-4240
Silvertip Lodge	406-682-4384

Motels in Twin Bridges:

Copperfield LLC	406-684-5896
Stonefly Inn	406-684-5648
Old Hotel B&B (seasonal)	406-684-5959

Motel in Lima:

Mountain View	406-276-3535
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Beaverhead-Deerlodge National Forest

Aquatic Invasive Species Prevention

There are many pathways for introduction and spread of AIS, which can result in severe economic and ecological impacts. The Montana AIS Management Plan emphasizes that the most effective method to control the spread of AIS is to prevent the introduction into a waterway.

This strategy should not be construed as a roadblock to urgent suppression action when life or property is threatened. When a situation arises, when immediate suppression action requires noncompliance with this strategy, it shall be documented and passed to the land management agency.

STANDARD PREVENTION GUIDELINES

Pre-Use Inspection:

Upon initial arrival to the incident on the B-D NF and prior to use, equipment that will have contact with a water source will be washed using a B-D AIS prevention kit and by following the enclosed protocol.

B-D disinfection protocol requires use of 5% Quat chemical to water solution with a 15 minute set time, followed by a rinse with clean water. Approved Quat products include Sanicare Quat 128® or Sparquat aka Green Solutions High Dilution 256® (these chemicals are interchangeable and one of them will be included with the B-D AIS kit).

As a last resort, a 5% bleach to water solution (20 parts water to 1 part bleach) with a 10 minute set time and rinse with clean water may be used in place of Quat chemicals if there are no other options. An exemption to the washing requirement can be granted if documentation is presented to verify that the visiting equipment was treated prior to arrival to the B-D NF.

A final visual inspection for any mud or aquatic plants will complete the inspection process. If plants or mud are detected, then repeat the process until the bucket is completely clean. This process should be done a minimum of 300ft away from any body of water.

When the aircraft is demobilized from the incident, the process will be repeated to ensure that no AIS species are transported to a new incident at another location.

Documentation of cleaning will be issued by the helicopter manager to the helicopter pilot stating the bucket was cleaned in accordance with the Forest's AIS plan.

B-D Phone List/Organization

B-D PHONELIST

Dillon Interagency Dispatch Center

406-683-3975
Toll Free 866-518-0590

Melany Glossa

Forest Supervisor
Office 406-683-3995
Cell

Mike Goicoechea

Forest FMO
Office 406-683-3955
Cell 406-369-3712

Dennis A. Morton

Forest Aviation Officer
Office 406-683-3956
Cell 406-660-2318

David Mosher

Dispatch Center Manager
Office 406-683-3991
Cell: 406-491-0346

Patty Williams

Asst. Dispatch Manager
Office 406-683-3986
Cell 406-490-8200

Dillon RD 406-683-3900

Jud Hammer (FMO)
Office 406-683-3983
Cell 406-660-2319

Wise River RD 406-832-3178

David Henson (AFMO)
Office 406-832-3178
Cell 406-660-2314

Wisdom RD 406-689-3243

Diane Hutton (FMO)
Office 406-689-3243
Cell 406-660-2324

Butte/Jefferson RD

Butte 406-494-2147
Whitehall 406-287-9129
Kevin Smith (FMO)
Office 406-494-0215
Cell 406-491-0202

Madison RD 406-682-4253

Jon Agner (FMO)
Office 406-682-4253
Cell 406-925-3802

Pintler RD 406-859-3211

Joe Brabender (FMO)
Office 406-859-3211
Cell 406-691-0369

EMS and Medical Facilities Locations, Phone Numbers and Frequencies

Name	Location Lat/Long	Frequency	Emergency Room Phone #	Landing Pad Information
Barrett Hospital Dillon MT	N 42 12.131 X W 112 38.790	155.340 Tan EMS A/G	406-686-3000	Type 2/3 OK Fenced in Pad
Butte-St James Hospital	N46 00.541 X W112 32.670	155.340 Tan EMS A/G	406-723-2580	Unsecured pad call ahead Type 2
Madison Valley Hospital	N45 21.146 X W111 43.924	155.340 Tan EMS A/G	406-682-4222	Unsecured pad call ahead Type 2/3 OK
Bozeman Deaconess Hospital Bozeman MT	N 45 40.162 X W 111 01.146	155.340 Tan EMS A/G	406-585-1000	Unsecured pad call ahead Type 2/3 OK
St Patrick's Hospital Missoula MT	N 46 52.512 X W 114.00.009	155.340 Tan EMS A/G	1-800-991-7363	Has Helicopter Life Flight 12,000 lb pad limit, call for landing

During Actual Suppression Operations

Known AIS sites should be avoided as a first precautionary measure. Contact your local Aquatic Specialist to acquire detailed AIS infestation information for your fire area. Private ponds will be considered suspect unless tested otherwise.

During the operational period if an AIS-infected dip site is used to provide suppressant to the fire via aerial delivery, the equipment contacting the water will be cleaned and inspected before moving to a new dip site.

If using AIS-contaminated waters, aerial drops will occur at a minimum of 300ft away from any live body of water.

When situations permit safe operations, aircraft should dip or draft water from the deepest portion of a lake or stream to avoid picking up bottom sediments from the water source. Aircraft operation safety takes precedence.

Resource advisors will be contacted for extended attack operations and multiple aircraft situations to ensure prevention practices are being adhered to.

MINIMUM PREVENTION GUIDELINES

This standard will be used when a B-D AIS kit, dip tank, pressure washer and Quat or bleach solution is not available, tanks are not set up, or time and logistics do not allow

Pre-Use Inspection:

Upon initial arrival to the incident on the B-D NF and prior to use, equipment that will have contact with any water source will be washed with uncontaminated water 300ft from any body of water.

This equipment will then be visually inspected for the presence of any mud or aquatic plants. If plants or mud are detected, repeat the process above until the equipment is completely clean.

During Suppression:

Same as the Standard Prevention Guidelines listed previously.

Aerial Life Flight Services and Other Emergency Situations on the Beaverhead-Deerlodge NF

This plan is to be used when an incident within an incident occurs or when non fire situations arise and our resources are requested to participate in the operation. The plan will address procedures during Initial Response situations involving local resources. When utilization of aircraft for delivery of personnel to an incident and transportation of injured parties and EMS personnel is required, operations need to be coordinated through the Dillon Dispatch Center or incident management team to ensure airspace issues are coordinated and forest leadership is informed. The Beaverhead-Deerlodge National Forest does not have the ability to provide advanced life support systems. If this capability is required Life Flight needs to be specified.

When an (Initial Response) Employee happens upon an accident in the field

Incident Commander/First responder; provides information and identifies needs.

Contact dispatch and convey the following information:

- Nature of incident
- Emergency medical services needed (personnel, equipment, life flight, hoist capabilities, EMT's, etc...)
- Transportation needs (air/ground)
- Landing zone dimensions and location, jump spot or rappel site (Lat/Long)
- Any additional information requested

Dispatch will initiate Emergency Protocols including the following:

- Contact, request and/or dispatch the needed resources including frequencies for the incident
- Notify the Incident Commander of what is enroute to the incident and freqs to contact resources
- Provide ETA of resources in a timely manner
- Deconflict airspace when using aerial resources
- Notify neighboring units if incident is within five miles of a border
- Flight follow the aircraft to and from the incident
- Ensure follow up is completed and all required personnel are informed. Aircraft assigned to an incident that are being utilized for an Incident within an Incident operation will make contact with Dillon Dispatch Center and flight follow with them outside of the teams designated airspace

Air Ambulance Request (info Called into Dispatch/Incident Communications)

Injury Information:

Number of patients: _____

Is patient(s) able to walk

Yes _____

No _____

Patient Information

Age: _____

Gender: _____

Height/Weight: _____

Level of consciousness: _____

Chief complaint: _____

Special consideration (splint/traction, airway): _____

Incident Site Information:

Geographic location of incident:

Highway/Roadway: _____

Mile Marker(s): _____

River(s): _____

Mountain Range(s): _____

Lat/Long of helispot: _____

Helispot complete

Yes __ Approved for Type _____

No __ (estimate time of completion) _____

Weather & physical conditions at helispot

Elevation: _____

Winds: _____ Gusts: _____ Direction: _____

Visibility: _____

Hazards: _____

Terrain factors: _____

Size & condition: _____

Incident Aircraft Onscene/ In Area:

Tail # _____ Freq: _____

Tail # _____ Freq: _____

Tail # _____ Freq: _____

Tail # _____ Freq: _____